EXHIBIT 3

US7054346B2	Specification Support	Canon EOS R5 camera (Including but not limited to Canon EOS R5 camera) (The accused product)
13Pre. A wireless endpoint comprising:	FIG. 2 shows a high-level block diagram of a representative **wireless endpoint 200** for use in accordance with the principles of the invention. [Col. 3, Line 13-15]	The accused product acts as a wireless endpoint. The accused product, Canon EOS R5 camera, is one of the latest Canon cameras (i.e., a wireless endpoint). Canon EOS R5 Canon EOS R5 offers next-generation refinements in image quality, performance, and reliability. The accused product supports Bluetooth 5 technology. As an example- Canon EOS R5 uses Bluetooth 5 to transmit data. Bluetooth 5 technology is based on Adaptive Frequency Hopping, which helps in reducing the interference. See Fig. 1, Fig. 2, and Fig. 3. **Citation 1:Canon EOS R5 camera** Fig. 1 Source: https://www.usa.canon.com/internet/portal/us/home/products/details/cameras/eos-dslr-and-mirrorless-cameras/mirrorless/eos-r5/eos-r5 , Page-1, Last Accessed on September 29, 2020, Exhibit A

		Citation 2:Canon EOS R5 camera and Bluetooth 5
		Fig. 2
		Source: https://downloads.canon.com/nw/camera/products/eos/product-1/pdfs/EOSR5_specifications_8.11.2020.pdf, Page-18, Last Accessed on September 29, 2020, Exhibit B
		Citation 3:Frequency Hopping

		Bluetooth 5 / Go Faster. Go Further. **8.0 Improved Frequency Hopping** Bluetooth uses Adaptive Frequency Hopping when in a connection. This is an algorithm which determines the radio channel to transmit and receive on and involves the selected channel changing frequently such that data is transmitted over a wide selection of channels. This helps make Bluetooth perform well in busy radio environments. Fig. 3 Source: https://www.bluetooth.com/wp-content/uploads/2019/03/Bluetooth_5-FINAL.pdf, Page-23, Last Accessed on September 29, 2020, Exhibit C
13a. a transmitter for transmitting signals using frequency hopping over a time period T; and	as further described below) and communications interface(s) 265 for coupling to one or more wireless communication paths as represented by path 266 (e.g., 265 represents a wireless **transmitter** and a wireless receiver). In the	The accused product comprises a transmitter for transmitting signals using frequency hopping over some time T. The accused product supports Bluetooth 5 technology. Bluetooth is a standard technology used for exchanging data (i.e., a transmitter for transmitting signals) between fixed and mobile devices for short distances. Bluetooth 5 technology is based on Adaptive Frequency Hopping, which helps in reducing interference in a period. See Fig. 4 and Fig. 5.

context of this invention, e.g., processor 250 and memory 260 implement (among other functions not described herein) **a constrained frequency hopping method for selecting frequencies for use in transmission of signals via communications interface 265.** [Col. 3, Line 21-29] **hopping frequency** sequences are constrained in order to reduce, or minimize, repeated frequencies **over a time period T.** [Col. 3, Line 37-39]	**Citation 4:Canon EOS R5 and Bluetooth 5** Fig. 4 Source: https://downloads.canon.com/nw/camera/products/eos/product-1/pdfs/EOSR5_specifications_8.11.2020.pdf , Page-18, Last Accessed on September 29, 2020, Exhibit B **Citation 5:Frequency Hopping** Fig. 5

		Source: https://www.bluetooth.com/wp-content/uploads/2019/03/Bluetooth_5-FINAL.pdf, Page-23, Last Accessed on September 29, 2020, Exhibit C
13b. a processor for pseudorandomly selecting a frequency from a set of N frequencies such that over at least a portion of the time period T, the frequency selection is constrained to less than the N frequencies and such that at least one of the selected frequencies is prohibited from subsequent selection in at least a portion of the time period T	In accordance with the invention, a wireless endpoint transmits signals using frequency hopping over a time period T **by selecting a frequency from a set of N frequencies such that over at least a portion of the time period T, the frequency selection is constrained to less than the N frequencies**. [Col. 2, Line 31-36]	The accused product has a processor for pseudorandomly selecting a frequency from a set of N frequencies such that over at least a portion of the period T, the frequency selection is constrained to less than the N frequencies and such that at least one of the selected frequencies is prohibited from the subsequent selection in at least a portion of the period T. The accused product uses adaptive frequency hopping that allows for the Bluetooth devices to improve their immunity to interference from and avoid causing interference with other devices. The adaptive frequency hopping replaces the unused channels by the used channels in a pseudo-random way. (i.e., pseudorandomly selecting a frequency from a set of N frequencies such that over at least a portion of the period T). See Fig. 6. **Citation 6:Adaptive Frequency Hopping- Pseudo-random selection**

7.2   ADAPTIVE FREQUENCY HOPPING

Adaptive Frequency Hopping (AFH) allows Bluetooth devices to improve their immunity to interference from and avoid causing interference to other devices in the 2.4 GHz ISM band. The basic principle is that Bluetooth channels are classified into two categories, *used* and *unused*, where used channels are part of the hopping sequence and unused channels are replaced in the hopping sequence by used channels in a pseudo-random way. This classification mechanism allows for the Bluetooth device to use either all or fewer than the 79 channels required in the Core Specification v1.1. The minimum number of channels allowed by the Bluetooth specification is 20.

Fig. 6

Source:

https://www.bluetooth.org/docman/handlers/DownloadDoc.ashx?doc_id=421043,

Page-258, Last Accessed on September 29, 2020, Exhibit D

The Bluetooth 5 technology uses a new channel selection algorithm with adaptive frequency hopping, which produces hopping sequences, which are pseudo-random and distinct sequences in a period T. The distinct sequence helps to use the different channels rather than the same channel, avoiding repetition at a different time hop in a single period. (i.e., least one of the selected frequencies is prohibited from the subsequent selection in at least a portion of the period T). See Fig. 7.

Citation 7:Distinct Sequence

| | | Bluetooth 5 introduced a new channel selection algorithm called *channel selection algorithm #2*. Hopping sequences are now pseudo random and the distinct sequences which are possible are very large. Devices can indicate in connection parameters whether they support the new channel selection algorithm. Channel selection algorithm #2 makes use of a shared event counter, which ensures that each peer in the connection selects the same channel from the next available channel in a pseudo-random sequence.

Fig. 7
Source: https://www.bluetooth.com/wp-content/uploads/2019/03/Bluetooth_5-FINAL.pdf, Page-23, Last Accessed on September 29, 2020, Exhibit C

Note: Source code review /Product testing could further help in gathering evidence related to the claim limitation "*selected frequencies is prohibited from the subsequent selection in at least a portion of the time period T*" |
| **13c.** where N is the total number of frequencies available for frequency hopping. | In accordance with the invention, a hopping state, H, is defined to be:
H={Ho, H1. . . . . HF 1, HF, ... HN-1}, which is a vector of | The accused product comprises wherein N is the total number of frequencies available for frequency hopping.

The accused product uses adaptive frequency hopping that allows for the Bluetooth devices to improve their immunity to interference from and avoid causing |

	length N, where **N is the total number of frequencies available to hop over**, and F is sN and **is the number of frequencies in H over which the wireless end point is constrained to hop.** [Col. 3, Line 57-64]	interference with other devices. The Bluetooth channels are divided into two categories used and unused. The channels for frequency hopping are selected from the used and unused channels. (i.e., N). See Fig. 8. **Citation 8:Total Frequencies** **7.2 ADAPTIVE FREQUENCY HOPPING** Adaptive Frequency Hopping (AFH) allows Bluetooth devices to improve their immunity to interference from and avoid causing interference to other devices in the 2.4 GHz ISM band. The basic principle is that Bluetooth channels are classified into two categories, *used* and *unused*, where used channels are part of the hopping sequence and unused channels are replaced in the hopping sequence by used channels in a pseudo-random way. This classification mechanism allows for the Bluetooth device to use either all or fewer than the 79 channels required in the Core Specification v1.1. The minimum number of channels allowed by the Bluetooth specification is 20. Fig. 8 Source: https://www.bluetooth.org/docman/handlers/DownloadDoc.ashx?doc_id=421043, Page-258, Last Accessed on September 29, 2020, Exhibit D

References Cited

Exhibit(s)	Description	Link
Exhibit A	Canon EOS R5	https://www.usa.canon.com/internet/portal/us/home/products/details/cameras/eos-dslr-and-mirrorless-cameras/mirrorless/eos-r5/eos-r5
Exhibit B	Canon EOS R5 and Bluetooth	https://downloads.canon.com/nw/camera/products/eos/product-1/pdfs/EOSR5_specifications_8.11.2020.pdf
Exhibit C	Bluetooth 5	https://www.bluetooth.com/wp-content/uploads/2019/03/Bluetooth_5-FINAL.pdf
Exhibit D	Bluetooth 5.0 Specifications	https://www.bluetooth.org/docman/handlers/DownloadDoc.ashx?doc_id=421043